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ABSTRACT

A 1991 conference provided a forum where workplace educators could analyze their experience. Participants agreed that establishing a partnership between business or labor organizations and education providers was a key step in developing an effective workplace literacy program. Participants also saw the importance of curriculum development to project success and suggested promising curriculum development strategies. Participants identified as effective those recruitment techniques based on strategic plans that included incentives for worker participation. The focus group on staff development focused on the projects' failure to anticipate a need for and to incorporate a systematic staff development and training effort. Other management issues included the importance of a well-qualified coordinator and regular class attendance. Participants described a mix of indicators and data-gathering methods that could be used to measure either student ability or program outcomes. They agreed that new kinds of assessment and evaluation methods were needed to replace traditional academic measures that had little relevance to most program goals. In response to questions dealing with future policy direction, participants recommended longer grant periods, incentives for project partners, and states' assumption of new roles. (Appendixes include results of the "Critical Issues" and "Program Continuation Issues" surveys and participant list.) (YLB)

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WORKPLACE EDUCATION:

VOICES FROM THE FIELD

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U.S. DEPARTMENT OF EDUCATION
NOVEMBER 1992

WORKPLACE EDUCATION: VOICES FROM THE FIELD

PROCEEDINGS

NATIONAL WORKPLACE

LITERACY PROGRAM

PROJECT DIRECTORS

CONFERENCE,

September 1991

U.S. Department of Education
Office of Vocational and Adult Education
Division of Adult Education and Literacy
Washington, DC 20202-7240

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CONTENTS

Executive Summary 7

I. Partnership and Organizational Principles 11

II. Curriculum Development 19

III. Recruitment 25

IV. Staff Development and Other Management Issues 29

V. Assessment and Evaluation 33

VI. Future Policy Direction 43

Appendices 48

A. Results of the "Critical Issues" Survey

B. Results of the "Program Continuation Issues" Survey

C. Conference Participants

D. Conference and Reporting Team

"We need program initiatives that encourage innovation, risk-taking, and reconceptualizing of 'literacy' and 'basic skills.'"

Comment by Project Director
September 1991 Conference

EXECUTIVE SUMMARY

In September 1991, the United States Department of Education, Office of Vocational and Adult Education, convened representatives from 39 programs funded by the Department in the second cycle of the National Workplace Literacy Program.[1] A critical element in the success of the National Workplace Literacy Program (NWLP) has been the development of a cadre of workplace literacy project directors nationwide. These experts, managing grants funded by the Program, have expanded their knowledge and enhanced practice with their experience.

The 1991 conference--the first of its kind--provided a valuable forum where workplace educators could analyze their experience. This conference summary is intended as a means of further disseminating the valuable information presented and views aired by the workplace literacy professionals who participated in that conference. Topics addressed, based on an earlier survey of participants' priority interests, were:

- Partnership and organizational principles;
- Learning system issues, including staff development and management, recruitment, assessment, and curriculum development;
- Evaluation methods; and
- Program policy direction.

The discussions of these topics yielded a few recurrent themes that can be considered either current or emerging issues of major significance to the field of workplace education. The themes are identified and summarized below.

THEME #1: ESTABLISHING A STRONG PARTNERSHIP

Establishing a partnership between business or labor organizations and education providers is a key step in developing an effective workplace literacy program.

Although business, labor and education may have different expectations about what workplace literacy can accomplish, each recognizes the value of establishing partnerships to develop and support workplace education. Effective areas of partnership lie in the overlapping interests of business, labor, education providers, and the workers themselves. Partnership relationships are built and maintained by articulating mutual goals, negotiating resources, respecting differences, and committing time and energy to the project. A written partnership agreement is important because it clarifies responsibilities and expectations. The agreement can be revisited periodically to check on progress. While the workings of each partnership are

[1] *Appendix D lists conference participants.*

unique to its participants, effective programs must have commitment from top leaders, middle managers, unions (if applicable), and the workers.

Theme #2: Curriculum

Developing curriculum is important to project success.

A broad range of curriculum development issues emerged from the conference. Development of contextual workplace curriculum is a process encompassing discreet steps as well as a product. Job task analysis is important to tailor curriculum to clear, long-term goals of business, labor and the worker. Curriculum incorporates not only literacy skills needed in the workplace today, but also those that will be needed as the workplace changes--skills such as team-building and problem-solving. Elements of curriculum developed can be transferrable among similar industries or from one industry to another.

Theme #3: Recruitment

Recruitment and retention efforts should be strategic and include incentives for worker participation.

Effective recruitment techniques are based on strategic plans that include incentives for worker participation. Examples of successful recruitment techniques include flyers enclosed in pay envelopes, announcements in employee newsletters, worker focus groups, introductory videos, and use of employee networks. To support documentation of program outcomes, research on recruitment should investigate what factors may encourage or inhibit employee participation in work-based basic skills programs.

The range of skills teachers need for work-based programs are best taught through ongoing systems of staff development and networking. Staff development programs for work-based literacy must be systematic and ongoing. Project planners should include staff development systems in their comprehensive plans and budgets. Effective staff development programs communicate an understanding of instructional, assessment and evaluation techniques designed for the workplace and a sense of the workplace itself. While promising practices in work-based instruction and program management can be identified, no clear formulas exist to meet the unique challenges of every site.

Theme #4: Assessment and Evaluation

Assessment and evaluation of work-based programs are challenging, and new evaluation and assessment resources are needed for workplace literacy programs.

Defining assessment and evaluation, the purposes for each activity, and how to do them effectively in workplace literacy programs poses challenges. Practitioners need help in designing and using appropriate data-gathering instruments and time during the project period to make use of these skills. Practitioners are pushing the field in this direction by generating awareness of the need to create new evaluation resources for workplace education.

They are taking the lead in creating new assessment and evaluation models and encouraging research and development actitivies that will provide the support these long-term developments require.

THEME #5: WORKER INVOLVEMENT

Worker involvement is central to success.

To create a successful project, workers must be involved in developing program goals, policies and practices. Projects are finding new ways for workers to participate in program planning, demonstrate their achievements, and suggest program improvements. When workers have a meaningful role in the program and its evaluation, they are more likely to feel a sense of ownership and work hard to make the program succeed.

LOOKING AHEAD

Future policy directions.

Grant periods of 18 months are too short to develop curriculum and assessment instruments and to identify fully the range of promising practices that flow from workplace literacy projects. Longer grant periods are needed as well as policies that encourage project partners to include workplace education in their long-term policies and plans. As federal support for workplace literacy training grows, states will assume increased roles in these workplace efforts. To ensure the success of such state programs, states must: encourage diversity of program design and providers; develop specialized programs of technical assistance; take a participatory approach to helping build local partnerships; and help coordinate workplace basic skills services with other services while maintaining workplace literacy's unique character. The best of what has been learned from the National Workplace Literacy Program then can be shared nationally.

"We need to meaningfully involve both education and corporate partners--hold both accountable and empower both, set meaningful and attainable goals, and help them expand their definition/perception of literacy."

Comment of Project Director
September 1991 Conference

I. PARTNERSHIP AND ORGANIZATIONAL PRINCIPLES

DEFINING THE ISSUE

Partnership and organizational principles were defined on the conference agenda as "How the program functions in the context of the host company, with special attention to the role of supervisors, union stewards, and other key company/agency players in promoting and supporting the program."

The conference commentator, in introducing the session, described workplace education programs as "the meeting of two cultures." This concept resonated deeply with the conference participants, and provided a foundation on which to build an analysis of the elements of effective partnership. The main points made by the commentator were:

- A workplace education program provides a framework for understanding a range of partnership problems that may emerge when developing a workplace education program.
- The concept of organizational culture has been used to describe the business environment for some time. But it is a newer idea to think of education as also having a culture.
- The learning curve for the education provider is typically very high at the start of a workplace education project. The education provider is a learner in a new culture, with challenges often being made to its own culture--the way it thinks about and conducts its work. In this situation, patience, endurance, and open-mindedness encourage reciprocal behavior from business and labor.

Developing a successful partnership is the cornerstone of an effective workplace education program. Conference participants had much to share regarding how to establish a successful partnership and avoid difficulties.

PROMISING STRATEGIES

Conference participants agreed that it is essential to recognize from the beginning that business and education are engaged in transforming the culture of the workplace. When the three cultures of business, labor and education come together, they create a new culture. It is not clear what this new culture looks like; it varies in each workplace.

As the visiting culture, the education program bears the responsibility for integrating itself into the host culture, understanding the goals of that culture, and clarifying and promoting them through education. At the same

time, the role of educators is to help business and labor understand what it takes for someone to learn. For example, one participant said: "[Managers need to know that] in six to eight weeks, a sixth-grade reader will not be a twelfth grade reader." Grade level increases are not the goal, but increased competency at the worksite is.

Participants agreed that real partnership is more than a paper agreement. As one participant said: "Signing a piece of paper does not a partnership make." Real partnership demands time, resources, patience, flexibility, hard work and commitment. Developing a real partnership is integrally linked to the most important part of planning a program--negotiating a set of common goals from the different needs and agendas of partners. The clearer the common goals, the stronger the partnership--and vice versa.

To develop a functional partnership, partners must be identified, brought together, and encouraged to buy into the program. The partners coming from a typical workplace might include CEOs, top-level managers, supervisors, human resource managers, union officials, workers, and "natural leaders" from all levels. The education partners might include a program coordinator, other administrator, and teachers.

Building the partnership and the partnership's first function--establishing a program planning process--must begin at several different levels. Building a partnership cannot wait until after classes are established. Rather, building an effective partnership and actively involving all the partners in the program planning process from its inception will help to ensure the success of the instructional program, from recruitment through curriculum development, implementation, and evaluation.

An effective partnership consists of relationships between different groups, at different levels, for different purposes. Examples include:

- Agreement among partners to provide needed services at convenient hours, in a space conducive to learning, with a curriculum that meets workers' needs.
- Communication among educators, management and union leaders (if appropriate) to agree on the moral and logistical support workers need to participate actively in the program.
- Negotiation between management and the union (if applicable) to ensure mutual support of education as a benefit for workers.
- Dialogue among teachers, supervisors, and union leaders (if applicable) to ensure that daily production quotas and other organizational concerns do not interfere with the education program, and to enable teachers to make instruction as relevant as possible to present or future work.

- Communication between teachers and workers to ensure that the workers' educational goals are being met.

Conference participants also said that the partners may need assistance in learning how to establish themselves as a working team. This help might take the form of a training seminar, written guidelines, or technical assistance from other programs.

The participants identified the following effective strategies for establishing strong partnerships:

- **Forge among partners a shared commitment to establish an effective program.** Recognize that building an effective partnership requires resources that partners may need to enhance. These resources include patience, flexibility, open-mindedness, and negotiating skills. Regarding flexibility, one participant's advice was to "Go slow. Take a research and development approach." There is no one formula for developing a partnership or planning a program that works. What is expected to work at the beginning may change over time. Developing flexibility is especially important for educators who may be accustomed to working in structured educational institutions. These educators may be less ready to respond to change than their business or union partners. In these cultures, organizational change can come rapidly--for example, as manufacturing processes are overhauled in response to demands from customers.

- **Find counterparts at the start of the planning process.** Establish a coordinating council or an advisory committee that meets regularly. Establish a program analysis committee or job task group to help identify areas of needed learning. In one company, a program analysis committee developed a plant-wide glossary to define terms used in the production process.

- **List of all the partners' expectations**. Work out a single expectation that all partners can agree on and live with. This is the starting point. The process of clarifying expectations will then continue over time. Developing a program is an evolutionary process.

- **Enlist the support of front-line supervisors and shop stewards, if applicable**. They are a critical part of the partnership. They serve as interpreters of management and labor goals to the workers on a daily basis. Without their support and involvement--or with mixed messages from them to the workers about the value of participating in an education program--an education program will not function effectively. Invite them to help develop classes and recruit.

- **Always invite all parties to meetings concerning the project.**
- **Treat workers as full partners and resources in program development.** Involving workers fully in program planning, implementation, and evaluation activities is necessary for full partnership.
- **Recognize and follow protocols.** Pay attention to company politics and who is controlling the grapevine. The grapevine is a vital communication link. Involve not only the official but also the unofficial labor and management hierarchies in planning and communication.
- **Acknowledge that the timeline for establishing a fully effective partnership and program appears to be at least two years and may take as long as five.** At the end of 18 months, most program representatives reported that their programs were just beginning to bear fruit. One participant put it this way: "The [federal] program time line is not always in sync with the corporate time line. It might take three to five years to really wean the programs."
- **Carefully design and provide thorough orientations and training programs for all of the partners.**
- **Designate a coordinator with good management and human relations skills** who has access to all members of the partnership and is charged with facilitating its development.
- **Understand that in a workplace where workers come from more than one ethnic, racial, or linguistic background, many cultural differences play out** within the workplace and education program. Furthermore, each worker comes to the education program with a set of assumptions about the learning process, and from a family and community with particular values about education. Sometimes a worker who wants to learn has to fight cultural biases about his or her potential for education that are rooted in class, ethnicity, family, or gender. This makes the concept of a meeting of cultures in a workplace education program truly multi-dimensional. In the words of one participant from Tennessee, "learning to learn is a cultural change."
- **Ensure that labor and management enter into meetings on an equal footing.**
- **Include unions, wherever they exist.** They can be a critical factor in unifying programs.

Obstacles To Success

Participants identified the following as some of the obstacles to developing effective program partnerships:

- **Successful partnerships between business, labor and education do not always come easily: they require work.** Business, labor and education often operate on different assumptions and time lines, making collaboration between them difficult. For example, a business might change its methods and goals rapidly in response to consumer demand. Educators develop curriculums and tend to stay with them over time. Lack of flexibility in each partner's position toward the other can be a serious challenge to maintaining a good partnership. Educators may have trouble being flexible because they are not as accustomed to changing rapidly. But business may find it difficult to accept that results of education efforts may not be easily quantified, standardized, guaranteed, or apparent in the short term.

- **Verbal support for education programs from upper-level managers communicated to supervisors or workers does not guarantee success.** Although upper-level management might provide rhetorical support for the notion of worker education, vital, ongoing, more-tangible support is critical. Such support is best communicated by commitment of company resources--for example, paid release time for workers participating in the program.

- **Supervisors are not always fully invested in the workplace education program.** This could be due to several factors, including lack of support for education from the larger institution, supervisors' concerns that production schedules will be slowed if employees are taken off the job, or fear that the newly-educated worker will diminish the supervisor by demonstrating new skills on the job or criticizing the supervisor in class.

- **Programs can be perceived as a screening tool.** Participants stressed that companies should not penalize workers--through demotion, embarrassment, termination, or other measures--who do not advance according to a predetermined set of academic or other standards.

- **Education is sometimes expected to be able to change corporate policy.** Do not put the burden of directing corporate change on the shoulders of educators. Education can work with business and labor to help clarify goals and to establish a relationship between education and goals, but business must be open to and ready for change.

- **Partnerships do not work well with competing companies.** When companies compete for customers or resources, it can be difficult--or impossible--for an education provider to work with

them in a consortium or other affiliation. Companies participating in such consortia must be able to share problems, goals, and strategies. Competing companies may be threatened by sharing this type of information.

NEEDED ACTION

The Department should reinforce the concept of partnership by treating all parties involved in the programs it funds as genuine, active partners. This might include sending materials to the business and union partners as well as to the education partners, inviting or requiring business and union involvement at conferences, and generally promoting full business and union involvement in workplace education.[2]

One focus group said very specifically that "realistic, not idealistic" orientation and training materials and resources for all the partners should be developed and made available before a program is begun. These orientation resources should focus on how to avoid land mines in planning and implementing programs.

The resources should be made available to the partnership as a whole and also at the level of the education provider and teachers. These orientation resources should address the following areas to enable partners to avoid pitfalls along the program development path:

Guidelines for Orientation for the Partnership

- Clarify and reclarify goals. Reconcile the different agendas of the partners.
- Set expectations that are realistic for the grant period.
- Build consensus among partners on the purpose of the program and how it meshes with the larger corporate or union plan. Agree on how to establish support with division or department managers and appropriate labor leaders.
- Clarify with the personnel and training offices what the link is--if any--between basic skills education and opportunities for further training and job promotion.
- Maintain continuity of partnership and staff. Renegotiate program goals as necessary due to the waiting time between proposal deadlines and notices of awards, or because of staff changes that may have occurred in any partner organization.
- Establish a dialogue with quality control staff to asssure compatibility of the education program with the company's quality philosophy.

[2] *The Department began to implement this recommendation in May 1992 by involving business and labor partners in National Workplace Literacy Program training and debriefing conferences.*

- Clarify issues of confidentiality of employer information, worker information, and other privacy issues.
- Do not assume that what works in one context will work in another.

Guidelines for Training the Education Provider

Provide preservice training to ensure that education staff understand:

- Industry-specific processes and union rules (such as manufacturing and service delivery procedures or negotiated agreements);
- Company or union-specific culture and processes (for example, production processes, decision-making procedures, channels of communication);
- The culture of the education institution (to determine how compatible company or union and education provider philosophies are);
- Hot issues (topics which are particularly sensitive or controversial in particular contexts); and
- The interface between workers' job descriptions and responsibilities, company goals, and program goals.

"The best curriculum in the world can be developed, but if instructors resist teaching it because they are steeped in traditional classroom approaches, then it is useless...."

Comment by Project Director
September 1991 Conference

II. CURRICULUM DEVELOPMENT

Defining The Issue

Curriculum development was defined on the conference agenda as "How education staff develop appropriate, work-specific educational materials, with special attention to designing your own materials and to using/adapting off-the-shelf materials." Prior to the first focus group discussion on Partnership and Organizational Principles, the conference commentator made observations about curriculum development that provided a context for discussion. These observations included the following points:

- Many companies are embracing a philosophy of continuous improvement in order to boost productivity. Continuous improvement involves workers as decisionmakers in all stages of the production process.
- The extent to which companies are committed to continuous improvement can be related to their commitment to workers' personal development. In a system of continuous improvement, the more empowered the worker is to problem-solve, innovate, work creatively with team members, and learn new skills, the more the worker contributes to the actual improvement of the production process.
- Because continuous improvement is the wave of the future, workplace basic skills programs should not focus solely on questions of how specific a curriculum is for a particular job, but rather on how it may help the worker adapt to new processes and systems such as team-based management.
- The goal is to develop a curriculum that is relevant to the culture in which the individual works.

Promising Strategies

All the participants were engaged during the period of their grant in developing their own curriculums. In fact, developing curriculums was a key focus of the work accomplished during the funding period. Some programs used off-the-shelf materials in combination with their own materials. Most participants developed their own curriculums. The starting points for developing curriculums differed from program to program and depended, in large part, on (1) how well the host organization identified jobs or tasks that need improvement; (2) how clearly the host organization articulated the relationship between the education program and its long-term needs and goals; and (3) the extent to which the host perceived education as part of long-range planning.

Some of the promising curriculum development strategies identified by the conference focus groups were:

- **Define curriculum as a process.** The groups devoted a good deal of time to the question of what a curriculum is. Participants generally agreed that curriculum is a process as well as a product. One group offered this analysis: "Curriculum is not just a product, a material thing, that can be replicated in similar settings. It is a description of the processes involved in developing it. It says: 'This is how we went about developing our product.'" The groups also offered these points about successful curriculums:

  -- Curriculums include objectives or competencies to be achieved and a description of how they will be achieved.

  -- Curriculum materials focusing on work should be eclectic in nature.

  -- Curriculum documents are resources, guides, and road maps.

  The curriculum development process and its outcomes (products) are shaped by one or more of the following variables:

  -- Institutional support;

  -- Characteristics of participants/learners;

  -- Enthusiasm of curriculum developers;

  -- Expectations and agendas (needs and goals);

  -- Employer perspectives on what curriculum outcomes are and which data are needed to demonstrate the outcomes;

  -- The skills of the curriculum developer(s) in course design; and

  -- The resources available (computers, time, and so forth).

One participant described curriculum as a nine-stage process that is transferable from program to program and that can be completed in 16-months.

1. Needs assessment
2. Training analysis
3. "Story board"/approval of concept
4. Draft by instructor (content) and designer (objectives)
5. Review by union, management, tutors, and education specialists
6. Piloting the curriculum
7. Feedback review by instructor and designer
8. Final graphics
9. Production

- **Expand the use of task analysis.** The role of task analysis in curriculum development was discussed with considerable energy. The context in which a traditional task analysis is conducted is more narrow than conference participants believed it should be. For example, one participant said that a task analysis should be carried out "not so much on skills as on what the worker needs to know about the company from start to finish."

  This attempt to apply the task analysis method to a broader context was echoed throughout the discussion on curriculum development. One participant said that her education staff "filled in the gaps that task analysis didn't get" with interviews with workers, and then tried to apply the task analysis method to broader tasks. For example, they tried to apply a task analysis to team work, participation in total quality management meetings, and participation in statistical quality control meetings.

- **Develop transferable curriculums.** One group was especially concerned with the question of whether curriculums developed under the auspices of the National Workplace Literacy Program are transferable to other programs and to programs in other industries. The dilemma was presented this way. Programs are funded as demonstration programs, and should develop curriculums that are replicable in other settings. They also need to develop--and are encouraged to develop--curriculums that are highly contextualized and customized. The group suggested a useful format for developing curriculums that may be replicable:

  -- List generic workplace or industry-specific competencies, for example, reading a chart;.

  -- Provide guidelines on how to develop this generic list into teaching and learning activities: for example, how to teach or facilitate the learning of reading of charts;

  -- Assess the importance of the generic competencies in local, specific contexts, for example, how important is it for workers to read this specific chart?

  -- Adapt materials to the local context: for example, adapt chart materials to the specific workplace. This might require using local chart materials.

  The following are additional promising strategies discussed in the curriculum development focus groups.

  -- Tie curriculum development to the broad context of quality of life at work. Limiting curriculum development to job-specific skills, as defined in the Adult Education Act, will limit the impact of the education program.

-- Use eclectic materials. Use whatever is in print in the plant and ask workers to bring in their own materials.

-- Ensure company and union (if applicable) support in curriculum development. Curriculum is a partnership concern. Develop your curriculum in the context of company and union goals and the company's long-term strategy for change.

-- Involve workers, supervisors, and other managers in the curriculum development process. Form a curriculum committee that brings together participants from different parts of the partnership. Ask the workers what they need to learn and let them help design and validate curriculum.

Obstacles To Overcome

- **Minimal resources for curriculum development.** Depending on program design, financial resources for curriculum development may be minimal, but good resource materials are also scarce. There are very few materials that can be used immediately or with minimal adaptation.

- **Confusion about whose job it is to develop the curriculum.** Should the teachers develop it? The program coordinator? Or someone from the learning provider agency with experience in curriculum development? Curriculum development is a time-consuming task that not everyone wants to do or is qualified to do. The confusion about whose job it is to develop the curriculum is sometimes compounded by lingering confusion over what a curriculum is.

- **Lack of clarity in the host company about the interface between its long-term goals and the goals of its education program.** Clarity about the interface between the company's long-term goals and the goals of its education program is a key element of an effective curriculum. A curriculum that does not grow out of common goals will not be as meaningful as one that does. Sometimes, education staff need to encourage other partners to articulate their long-term goals more clearly.

- **Underestimating workers' awareness of what they need to know.** Several participants echoed the sentiment that, despite lip service paid to learner-centered models of adult education, workers' own understanding of what they need to know to be more effective workers and human beings needs to be systematically incorporated into program curriculums.

Needed Action

A number of recommendations emerged from the participants' analysis of their curriculum development needs:

- In the planning stage, programs should specify who in each program is responsible for developing the curriculum. The work should be allocated with the understanding that it is creative, difficult, time-consuming, and specialized. Curriculum development funds should be allocated accordingly.
- Program planners should involve workers and other members of the program partnership in the curriculum development process from start to finish.
- Local educators and the Department should encourage business and unions to think about long-term goals and how workplace basic skills curriculum supports making those goals a reality.
- The Department should systematically disseminate curriculums developed by other projects.
- Using the curriculum materials it has collected, Department staff should develop a matrix of curriculum topics. This matrix would be a starting point for understanding which parts of already-developed curriculums might be used in other settings.

"Where should federal/state money be invested in workplace literacy? In large or small companies? Unions? collaborations within industries? In companies that commit to employee retention/promotion? Those that commit to longer-range education of employees? Or those that involve unions as equal partners?"

Comment by Project Director
September 1991 Conference

III. RECRUITMENT

Defining The Issue

Participants were asked to identify successful practices, problems, and issues regarding recruitment of students into workplace education programs for follow-up action. Recruitment was defined on the agenda as "The various methods and strategies that programs use to interest and actively recruit students into workplace education programs, with special attention to the value of release time as a recruitment strategy." In their group discussions, the participants broadened the issue to include retention of students as well.

Promising Strategies

The participants identified a number of activities for recruiting and retaining learners:

- Flyers enclosed in pay envelopes;
- Announcements in employee or union newsletters;
- Announcements by supervisors and union officials;
- Visits by the education provider to the worksite to explain the program directly to workers;
- A video shown to industrial workers;
- Face-to-face contacts with union officials;
- An open house at which potential students learn more about the program;
- A recognition ceremony with refreshments and speeches by company and union officials;
- A program coordinator on-site on an agreed-upon day, available to talk confidentially with potential students on a walk-in basis;
- A range of educational programs for employees to choose from, encouraging learning for all workers and thereby reducing the stigma of a basic skills class as something unusual;
- A "lunch and learn" workshop series in which employees are provided with a free meal while participating in a lunch-time workshop focusing on a topic identified as important by the workers themselves;
- Getting supervisors to understand the program and support their employees' participation in it through workshops targeted especially to supervisors. In these workshops, the supervisors learn about the program and help to shape it;

- Full or partial (50/50) release time for participating employees;
- Convenient, comfortable on-site location;
- Meals (provided by a hotel to employees participating in classes);
- Cash bonuses to employees for successful completion of the program;
- Confidentiality of program records and a clear policy that no employee's job status can be jeopardized by his/her participation in the program;
- Recruiters whom workers understand and trust. For example, when Hispanic workers in one program did not respond actively to recruitment appeals from Anglo education staff, the staff realized that the workers had had a not-always-happy history of "being told what to do" by Anglo supervisors. The education staff then asked Hispanic workers who had participated in the program to talk directly about the program to their nonparticipating co-workers;
- Tailoring instruction as closely as possible to the needs and interests of learners;
- A cadre of charismatic teachers;
- Counseling services to help students deal with obstacles that might otherwise prevent their participation;and
- Strong, visible support for the program from high-level management and union officials;

Obstacles To Overcome

Participants identified the following as some of the obstacles faced by employees when they consider the question of whether to participate in a workplace basic education program:

- **Cultural factors outside and inside the workplace.** In some cases, workers find themselves discouraged from participating in education programs by others close to them who feel threatened when workers step outside their expected role to take on new power in their lives. One example cited from a worker's life outside the workplace was that of a woman employee whose husband felt intimidated by having a wife with stronger basic skills than his own. Within the workplace, some workers do not want to reveal what they perceive as ignorance to fellow employees by being seen joining the literacy class.
- **Supervisor attitudes.** Supervisors are not always supportive of their employees' participating in education programs. Lack of

support can be due to several factors. These include concern that production schedules will be slowed if employees are taken off the job, or fear that the newly-educated worker will diminish the supervisor by demonstrating new skills on the job or criticizing the supervisor in class.

- **Mandatory vs. voluntary participation.** Some programs require that employees participate. As a result, some employees feel coerced and resentful of requirements to attend classes.
- **No release time.** Some programs require employees to make up work missed due to participation in education classes. This discourages workers who do not want to come back to find work piled up.
- **Other demands on students' time.** Even when workers are given moral support to further their education, some face logistical obstacles that prevent their participation. For example, if classes are held after work and the worker must be home at that time to take care of the children, he or she will be unable to attend class.
- **Resentment from other workers.** Some employees not eligible to participate in the company's education program (as in the case of English-proficient employees who would naturally not participate in a company ESL program) may become resentful when they see some workers getting special recognition and benefits not available to other employees.

Needed Action

Program planners should be aware of the many activities already developed to recruit and retain learners. But, beyond knowing how to use any particular recruitment/retention activity, planners also should approach the question of recruitment and retention strategically.

Planners should, for example, be aware of incentives and disincentives for participating in the program. While participation in workplace basic skills programs is commonly presented in the media as universally positive, experience shows that some workers encounter obstacles when they try to participate. Planners need to be aware of these incentives and disincentives for workers, possibly through asking workers in and outside the program, as well as those who have left the program, what is needed to encourage participation. Planners can then build on the positives while dealing constructively with the negatives.

"The workplace literacy program should not exist. It is a reaction to a system failure, thus it must establish criteria for its own demise."

Comment of Project Director
September 1991 Conference

IV. STAFF DEVELOPMENT AND OTHER MANAGEMENT ISSUES

DEFINING THE ISSUE

The focus group on staff development and other management issues dealt with a broad array of issues affecting the day-to-day operation of a workplace education program. The discussion topic was defined on the conference agenda as "The range of practical issues that programs confront day-to-day, with special attention to leveling of students in one class, location of classes, negotiating tensions between production schedules and the scheduling of classes, and orientation and in-service training for instructors."

PROMISING STRATEGIES

In this group, many participants focused on the projects' failure to anticipate a need for and to incorporate a systematic staff development and training effort. Participants also focused their attention on a range of other management issues.

STAFF DEVELOPMENT

There was general agreement that workplace education teachers would benefit greatly from a systematic orientation and training program. Teaching in a workplace education program is demanding work and requires many different skills--teaching skills, curriculum development skills, managerial skills, interpersonal skills, even, according to one participant, "the skills of a cultural anthropologist." Most teachers do, in fact, perform this range of functions, but this range of skills is a lot to expect from one teacher. The range would appear more manageable if offset by an orientation and training program for new staff, along with ongoing training, teacher-sharing, and in-service staff development for veteran staff.

Another participant described her belief in the importance of the empowerment of the instructor through education, as well as the empowerment of the workers. If instructors are truly to convey the joy of lifelong learning to their students, they should demonstrate it by participating in their own training programs. Effective training programs help establish an atmosphere of mutual learning, and break down the stereotypical definition of the teacher as the person with the answers and the student as the person with the questions. The teacher then comes to be regarded as a learner, too.

Because the participants operated grant projects negotiated before staff development plans were included in the negotiation plans, only one participant could point to a systematic effort to prepare instructors in her program--a required, 30-hour training program. From the materials and experience gained in that 30-hour course, instructors identify the skills

needs of their students. This becomes the basis for curriculum development and other classroom oriented activities. Other teachers in the program use the resource materials developed by the trainee. As a result, a body of knowledge about the program is continually being supplemented. In this 30-hour program, instructors are trained to:

- Use a testing system;
- Conduct a worker assessment;
- Conduct a work-site assessment;
- Interview supervisors (from whom the instructor collects workplace materials); and
- Observe employees at work.

Although veteran staff learn from the experiences and materials gathered by new staff, there is no formal follow-up staff training beyond this 30-hour program, which essentially functions as an orientation for new staff.

One program participant suggested that, in the absence of a formal staff training program, the process used to screen and select staff is the next best means of assuring qualified instructional staff. The key in this selection process is to find a flexible person who is known in the community and who can relate to the workers. There was agreement that programs should not rely on formal teacher certification as the sole criterion in hiring instructors, because paper criteria are not necessarily the most important in the workplace context. However, it was generally felt that a bachelor's degree should be the minimum educational requirement for teachers. Participants agreed that hiring tutors who graduated from the workplace education program would ensure a level of training satisfactory to the staff. Participants also agreed that it was critical to network with other adult education programs to enlarge the pool of potential applicants for staff positions.[3]

Other Management Issues

Participants generally agreed that the following are important management issues:

- **A well-qualified coordinator is an essential part of an effective workplace education program.** Generally speaking, the program coordinator oversees program development and manages the partnership. The program coordinator may schedule classes, develop curriculum, assess students, conduct program evaluations, convene partnership meetings, communicate regularly with supervisors, and even teach. In most cases, the coordinator is the glue that holds the various parts of the complex workplace education program system together. Participants agreed that, if there is no permanent coordi-

[3] The National Workplace Literacy Program now negotiates a unified staff development plan forevery project to be funded.

nator, it is important to designate a human resource manager, comparable company representative, or a teacher as the interim coordinator, until a permanent one is hired.

- **Workers must attend class regularly if a workplace education program is to be successful.** Conflicts between production schedules and scheduling of classes can interfere with regular attendance. To avoid such conflicts, the partners should agree on scheduling of classes before the proposal is submitted. Education partners should work with the employer, especially supervisors, to mitigate the loss of production time by, for example, choosing students from across departments and from throughout the facility.

- **Leveling of workers with different skills in one class can be a problem**. Some of the strategies used to address it include peer coaching, volunteer tutors, and administrative support that enables teachers to be flexible in the classroom.

- **Creative use of "drop-in" centers in the workplace can increase opportunities for workers to practice their skills** while also helping to establish a culture of education at work. Participants felt that workers should be allowed to drop in on their own time and during down time to interact informally with fellow learners, tutors, computers, or library materials. However, these drop-in arrangements are seen as supplements to organized instructional activities rather than as substitutes for them.

Obstacles To Overcome

Participants identified the following as some of the staff development and management obstacles they face:

- **Inadequate resources for teacher orientation and training.** Grants in this cycle did not require and, therefore, applicants overlooked adequate funding for these important activities. The Department now negotiates a unified staff development plan with every project to be funded

- **Scheduling training for part-time staff.** When programs make efforts to provide staff training, they may encounter difficulties scheduling it at a time that is convenient for teachers who work only part time for the program, who have second jobs elsewhere, or who have family responsibilities.

- **Requiring participation in training programs on unpaid time.** If a program identifies the need for a staff training program, but has not included participation in the training in the staff's job descriptions, and/or does not have the funds to compensate staff for the time they spend participating in a training program, difficulties may arise. Thinking through a strategic staff development plan should include planning paid training time for teachers.

- **Difficulties in recruiting experienced, qualified instructors.** Being a teacher in a workplace education program is demanding work and requires many different skills--academic, administrative, and interpersonal. Not only is it difficult to identify the resources to train good teachers after they are hired, it is difficult to find candidates with the range of skills needed for workplace education positions.

- **Inadequate commitment by partners to real partnerships.** In a poorly designed program, a private sector organization may become a partner with an education provider without understanding what the partnership requires. As a result, some business partners do not participate fully in the management of their programs. This may take the form of not attending meetings, failing to assure that mid-managers are informed of program developments, and being unresponsive to requirements attached to funding under the National Workplace Literacy Program.

Needed Action

A formal, comprehensive staff orientation, training, and development program for workplace educators is needed. The Department might fund the development of a generic program and then require all new staff to participate in a local version of it. If regular training is understood to be part of the job, teachers may complain less when they are required to attend. Regular teacher-sharings can take the place of formal training until more formalized training is developed. Programs should also promote the use of tutors in the multilevel classroom.

V. ASSESSMENT AND EVALUATION

Defining the Issue

The issues of assessment and evaluation were addressed in separate sessions at the conference. Because much of the discussion on these two issues overlapped, the two topics are combined in this summary.

In the agenda, assessment was defined as "the various methods that education staff use to assess student needs, with special attention to the usefulness of standardized tests and 'home-grown' measurements." Evaluation was defined as "the various methods which programs employ to evaluate themselves, with special attention to the value of outside evaluations and developing internal evaluation expertise."

Promising Strategies

Participants described a mix of indicators and data-gathering methods that could be used to measure either student ability or program outcomes. It was agreed that new kinds of assessment and evaluation methods are needed to replace traditional academic measures, which had little relevance to most program goals. The following are pieces of assessment and evaluation systems--which look at different things for different purposes--now being developed in the participants' programs and in other programs. Some of these methods are familiar ones, borrowed from adult education programs. Others represent innovations conceived in response to the need for more appropriate measures of success for learners in a workplace context.

Defining What Is to be Measured

- **Learners setting their own goals.** A number of programs have developed ways of getting workers to set goals for themselves. One program asks workers to identify the personal, academic, and job-related goals they hope to achieve in the program. These become criteria around which curriculums and assessments are organized. Another program helps workers to set their own measures by asking them to "tell me how you'll know you know this." A third program uses a road-mapping process in which the instructor helps the learner to identify specific goals and then plots a course toward achieving those goals.
- **Job-task analysis for an existing job.** If a program is to focus on enabling students to better perform specific job tasks, then one means of defining the skills required is a job-task analysis. Current training programs for workplace educators have placed much emphasis on various ways of performing a job-task analyses.

- **Job-task analysis for a cross-section of jobs.** When programs aim at enabling students to perform a number of existing or future jobs in a workplace, the job-task analysis process is applied to all of these jobs, to identify the range of skills workers need. One program has developed an assessment approach based on this kind of analysis of skills needed in a cross-section of jobs. When a worker can demonstrate 80 percent proficiency in a particular curriculum unit, the worker can then move on to a new section of the curriculum.

Data-Gathering Activities

- **Job-related tests.** In one hospital program, custodial workers are given a written test that asks them to interpret labels on containers of various hazardous materials typically found in the worksite. Food-service workers in another hospital are asked to show how they would read menu items and follow procedures. Another program excerpts paragraphs from the Occupational Safety and Health Administration (OSHA) manual and asks students to answer questions about the content.
- **Observation of ability to perform particular tasks.** In one example in which a company was concerned that employees take too much time filling out forms on the job, workers are observed over time to see whether they are accurately filling out forms any faster now than they did at the start of the program.
- **Review of students' promotion and salary records.** One program measures gains in workers' self-esteem and job skills by looking at how many promotions they apply for and/or actually receive. Another program looks at whether workers have received salary increases as a result of participating in the program.
- **Peer assessment.** Some programs set up activities in which workers assess each other's progress. These assessments can be communicated directly back to the individual worker in a feedback session or they might be compiled by the class as a whole to provide a picture of where the workers' collective and individual skills are at a given point.
- **Portfolios.** This is a technique borrowed from the "reading-and-writing" practitioners. Workers compile samples of their written work (including dialogue journals in which they carry on a written dialogue with the teacher over a period of time) and records of their reading behavior. These documents are combined with teacher-prepared assessments into a portfolio that is reviewed periodically to determine learner progress and identify new learning objectives.

- **Simulations.** In simulations, workers are challenged to solve a problem taken from their work experience, demonstrating how they would use various basic skills. Their performance of this simulated task is then rated by one or more observers.

- **Employee productivity ratings.** There is an increasing interest in using existing measures of employee productivity as an indicator of program impact on worker job performance. This may be a causal relationship between employee basic skills and productivity. In one example, in a job-related basic skills program designed to help hotel room attendants take more initiative on their jobs, employees learned how to use a telephone to punch in a code to signal that they had completed cleaning a room. It was initially thought that, by reviewing how efficiently these employees were able to use this telephone system, program staff could determine the effectiveness of the training. However, the telephone system sometimes malfunctioned and did not record accurate information about the employees' performance. For this reason, education staff decided against relying on records about the use of this equipment as an indicator of employees' job performance. However, hotel managers were able to reduce staff turnover and to achieve substantial pinpoint savings in recruitment costs, both attributable to existence of a workplace education program.

- **Interviews with supervisors.** Supervisors are asked, in interviews or questionnaires, to assess the impact of the program on employee productivity, safety, promotability, interest in learning, and other factors.

- **Self-assessments by students.** Workers are asked, in interviews or questionnaires, to assess their abilities to achieve various job-related and personal objectives.

- **Ratings by instructors.** In many programs, instructors record their observations of student performance in class or fill out questionnaires in which they rate changes in learners' skills and self-esteem.

- **Monitoring of employees' involvement in continuing education.** One indicator used to measure program impact is whether a worker is more willing to admit that he or she needs help with basic skills. A related measure is whether the employee goes on to pursue further education and training opportunities--within or outside the company--as a result of participating in the basic skills program.

- **Videc interviews.** In one example, a team of researchers interviewed limited English proficient workers on videotape. This

interview was held before the ESL program began, and workers were asked to identify situations in the worksite in which they had trouble communicating. For each worker, the research team recorded a list of problem areas that in turn were compiled into a list of topics to be covered in the ESL program. The interview also served as baseline documentation of the workers' English language abilities at the start of the program. Similar videotaped interviews were held at the end of the program to provide evidence of whether the workers' English skills had improved.

- **Assessment of employees' attitudes.** Employees' attitudes--toward themselves, their jobs, their supervisors, their fellow workers--are seen as important indicators of employee self-esteem and of how well employees can perform their jobs. These can be measured via interviews and questionnaires given to workers (one example is a job satisfaction survey) and their supervisors.

- **Case studies.** Some evaluators adapt ethnographic research methods to immerse themselves in a program for a period. They observe what goes on in the program; interview staff, workers, and others; review records; and otherwise collect data about what is happening in the program. This information is then presented in a narrative case study format, tying the threads of the program together and presenting the findings about the program within the context of the program itself.

- **Checking employees' basic skills against externally-defined criteria.** Some programs look at workers' abilities to achieve objectives already determined by outside sources, as in the case of the commercial driver's license test. If a student is able to pass that test, then the program is considered to have been successful in helping the student achieve that particular objective.

- **Review of workers' abilities to participate in other training programs and fill in for other workers.** One indicator of program effectiveness is whether workers are any more able to participate in other training programs, including cross-training related to jobs other than their current one, or to fill in when other workers are absent from their jobs.

- **Documenting incidental learning.** Many programs recognize that they have incidental impacts not intended in the official curriculum. One such impact might be enabling students to get more involved with their children's education. These outcomes are positive ones and are often supported by employers. However, federal funding guidelines based on statutory requirements to fund activities related to work cannot encourage programs to focus largely on incidental outcomes in instruction and evaluations. Such activities may be

supported by employer or union funds, but are not within the scope of current legislation establishing the National Workplace Literacy Program.

- **Documenting inquiries to the education provider from other companies.** As one measure of program effectiveness, education staff look at the number of inquiries they are getting from other companies in the area for help in setting up an employee education program. If the number of inquiries goes up, it is taken as a sign that the program is doing a good job and its reputation in the community is being communicated to other companies.

- **Measuring increases in education resources from host companies and unions.** Another indicator of program effectiveness is the willingness of host companies and unions to contribute resources such as matching funds, staff time, equipment, or facilities to the program. The more resources companies and unions are willing to contribute, the more they commit to the effectiveness of the program. Frequently, host companies and unions exceed the matching requirements of the National Workplace Literacy Program.

- **Documenting changes in employer's policies related to basic skills.** Some programs look at whether the employer's interest in literacy-related issues has increased. For example, do employers now better appreciate the strengths and limitations of employees with limited literacy skills and the role basic skills play in achieving higher productivity, safety, and other corporate goals? Such changes in their regard for literacy levels are seen as an indicator of the program's impact on the host organization. Similarly, evaluators consider whether the employer or union is now calling on the educator for input on issues (for example, production methods and personnel policies) not normally seen as the responsibility of an educator. Another indicator is whether the company has incorporated communication skills or other education-related concerns into the company's larger performance appraisals and training programs.

- **Monitoring employees' attendance in classes.** Some programs in which attendance is voluntary look at how regularly employees actually attend classes. This is seen as one indicator of how relevant, meaningful, and effective programs are in meeting employee goals.

- **Monitoring internal and external public relations.** A company sometimes sees employee education programs as a way of demonstrating to the workforce and the larger community that it cares about the company's employees. In one case, a new hotel was being criticized for hiring too many employees from outside the commu-

nity. In response, the company set up a basic skills program to prepare local workers to qualify for jobs at the hotel. Observation of public relations responses is one way of measuring the program's impact.

- **Measuring employees' safety records.** Some programs focus on improving employees' safety on the job. Safety records (accidents, injuries, proper handling of hazardous wastes, insurance rates) are possible indicators of employees' safety-related basic skills gains.
- **Assessing improved communication within the company.** Some programs look at how much communication has improved within the company--between employees at the same level, up and down the decision-making hierarchy, among employees from different ethnic backgrounds, within workplace teams, and between management and the union. One indicator of improved communication in ESL settings is less reliance on interpreters.
- **Documenting increases in complaints and suggestions from workers.** Some programs encourage employees to identify problems and speak up about them. One indicator of such a program's impact on workers' problem-solving, communication skills and self-esteem might be the number of complaints and suggestions submitted by those workers to management.
- **Measuring increased sales.** In programs in which the workers' abilities have a direct impact on company sales, sales figures are considered an indicator of whether the program is helping employees in their interactions with customers.

Data-Analysis Methods

While most of the discussion focused on descriptions of the above data-gathering activities, some attention was also paid to the question of "What do you do with the data once you've gathered it?" One data-analysis method mentioned was cost-benefit analysis, which some programs now are applying to workplace education situations. These programs analyze and present the data to funders and employers with the aim of identifying the return on investment dollar.

In this discussion, participants agreed that, before designing data-gathering instruments, it is important to clarify the goals of the program. This can be done by interviewing stakeholders in the program to identify the benefits they would like from the program. Once these goals and appropriate measures are agreed upon, data can be gathered at the beginning and then over the life of the program. In this way, evaluators can see what impact the program has had over time.

Obstacles To Overcome

Participants identified the following as issues that need to be resolved if workplace education programs are to carry out effective assessment and evaluation. Useful, reliable assessments and evaluations are difficult, in part because of confusion about what these terms mean in a workplace context. Programs are held accountable, but many workplace educators may not know what funders and businesses really expect from workplace education itself. Many employers see improved productivity as a goal but have not been specific about how to measure productivity. Some programs feel that students should develop life skills--such as balancing a checkbook. The Department's regulations allow curriculums to include critical thinking and team-building skills, but not life skills; the statute creating the program requires an impact on productivity in return for investment of federal funds. Therefore, funders want programs to focus on skills that are more job-related. Some programs feel that their learners make the clearest gains in affective areas, such as self-esteem and risk-taking, but these areas are perhaps the hardest to measure. Linking work and learning does not preclude a learner-centered approach to instruction, in which workers are centrally involved in any goal-setting process to ensure that the program focuses on goals that are meaningful and motivating to them.

Even when expected program outcomes have been clearly defined, developing valid, reliable tests and other instruments is not easy and requires expertise which some workplace educators may lack at this point.

If project designers do not take the time to understand the complexities of assessment and evaluation issues, and to define what they want to learn and the ways they can go about collecting needed information, they may settle for the quick-fix of standardized tests. When they do this, however, they usually realize the limited relevance of the data produced by those tests. Use of standardized tests often threatens workers who have previously had bad experience with them. These tests can also distract employees from the practical worksite uses of basic skills on which the program should focus.

People tend to think of standardized tests when they hear the term "assessment." Educators in particular are seen as having this mind-set, perhaps because they assume--correctly or not--that business persons want the kind of statistical data these tests produce. Although such tests provide a common language that can be used across programs, they were generally seen by conference participants as having little relevance to the real uses of literacy at work that are of concern to most employee basic skills programs. There are a number of other ways to get information for assessment purposes, but these alternative measures have not been very fully developed or widely disseminated.

Traditional measures of basic skills tend to focus on showing student deficits rather than validating their strengths. In a workplace education program, such an approach tends to reinforce negative attitudes about

assessment and evaluation and about the education program itself. Employees might see themselves as being "investigated for skill deficiencies" and having their job security threatened. This discourages active learner participation and risk-taking.

Programs are now being asked to demonstrate how employee basic skills education can enhance workers' productivity, safety, and other job skills. But it is not at all clear what the relationship is between employee basic skills and these job-related functions. And, even where there is a definable relationship, improvements might occur very slowly and not be measurable exactly at the end of an education program cycle in which evaluations are to be carried out.

Programs should define job-related outcomes flexibly. For example, a worker needs to perform many reading, writing, problem-solving, and oral communication tasks as well as recording that particular information. In addition to skills connected directly to equipment, there may be other workplace issues that need to be addressed. These might include a shift toward sharing responsibility, problem-solving, teamwork, a quality emphasis, or interpersonal communications.

Productivity, corporate culture, and other possible indicators of a program's impact are themselves affected by larger forces over which neither the company nor the union--let alone the education program--has control. For example, current economic conditions have adversely affected many companies, forcing them to make staff cutbacks, postpone purchases of equipment, and other measures that make it difficult for an education program to do its job. Using employee class attendance as a measure of program success is not regarded as a consistent resource, because employee attendance might be determined by other factors inside the workplace, such as layoffs, or beyond the employee's control, such as a need to deal with problems at home.

Some of those involved in a workplace that is hosting an education program might resist the idea of an evaluation because it raises questions about the status quo in that workplace. In one example, a manager was fired after workers in an education class were asked to assess their work experience and they identified the manager as being a source of trouble for many employees. Evaluations that ask workers to think critically about themselves and their workplace may intimidate supervisors and other employees.

Many workers and others involved in workplace education programs are not accustomed to being asked to define goals, assess their own progress or that of an education program, or otherwise think critically and express themselves. They may feel confused or threatened by evaluators who turn to them and ask, "What do you think?"

The process of identifying desired outcomes, designing appropriate data-gathering instruments, and gathering and analyzing data is time-consuming. This inhibits some people from getting involved in assessment and evaluation any more than necessary.

Employees are too often left out of the process of defining program objectives and assessing progress toward those goals. Workers should be involved in program design, identifying skills through job task analysis, testing the curriculum, and project management and evaluation.

Despite the fact that project staff do the hard work of gathering useful data demonstrating the program's effectiveness, some employers may disregard that evidence or may be unable to support workplace services after the grant period ends.

NEEDED ACTIONS

It was agreed that much work needs to be done to develop appropriate policy and tools for assessment in workplace education programs. The participants recommended that:

- **The terms "assessment" and "evaluation" should be more clearly defined** by the parties involved in workplace education. Currently these terms--and similar ones like "measurement" and "identification"--are often used interchangeably. This clarification of terms would include negotiating the purposes that assessment and evaluation are to serve. For example, assessment can be used for internal formative purposes or to provide summative information to program funders. Assessment can take the forms of "needs assessment," "outcome assessment" (program evaluation), or "learner assessment" (diagnosis). Each of these types of assessment entails a different audience, a different set of data-gathering instruments, and different sources of information.
- **Good evaluation should be tied to program design** in a systematic way. The evaluator should be involved from the start when the program is first put together. Information from formative evaluation should be continuously fed back for program improvement.
- **Evaluators need to recognize that education programs should not be expected to solve problems which may be caused by factors other than just inadequate worker basic skills.** Curriculums--and the evaluations done of them--should be designed as specifically as possible to focus on clearly-defined, realistic, and measurable results related to work. Such objectives would serve as clear indicators of progress toward broader goals, such as increased productivity.

- **Workplace educators need to develop the active participation of their partners** in programs and expand partner involvement in planning and running projects. Programs can be hindered by internal squabbling among the institutional partners. As one participant put it, "The hardest part of my job is the [interorganizational] politics." If a program evaluation indicates that partners are not holding up their end of the deal, then educators should ask for greater commitment or terminate the program.

- **The needed commitment from all levels of the organization can be built into the program by setting up a planning and evaluation structure** that reaches out to and involves representatives of those levels. These key players can be involved not only in goal-setting and other planning and evaluation activities, but as participants in class sessions. As participants, they can share what they know, get to know other workers better, and better understand what needs to be done to improve operations within the organization.

- **Experts in instrument design should be brought in to work with workplace educators** to develop valid and reliable instruments for use in workplace contexts. These instruments would focus on skills like blueprint reading, oral communications, and others that currently available standardized tests do not address. New types of instruments could have the benefit of producing meaningful comparative data while avoiding the limitations of traditional standardized tests that measure skills outside of meaningful contexts.

- **Evaluators should recognize that no single data-gathering instrument will serve the purposes of all programs**. And, even within a single program, a number of instruments will likely be needed to obtain answers to different types of evaluation questions.

- **Instructors might be given bonuses if their students demonstrate achievement of goals** they have set for themselves. Such a policy would encourage staff to see assessment as something meaningful and to focus their teaching more directly on the goals which students see as important to them.

- **Information on current efforts to develop appropriate assessment and evaluation strategies should be disseminated widely** within the field. Practitioners need to be given opportunities--via training courses, on-the-job experience, referral networks, and other means--to develop their assessment and evaluation skills.

VI. FUTURE POLICY DIRECTION

Defining The Issue

In the final focus group, participants responded to four questions presented on the conference agenda:

- What should be the National Workplace Literacy Program's policy direction? Should it be used, for example, to influence management practices in the private sector to move from assembly-line to team-based management and career ladder development for workers?
- What program practices can be successfully transferred when the program becomes a state-administered grant program?
- What issues should be addressed through program regulations or legislation?
- Are the program guidelines too narrowly defined?

Needed Actions

In response to the above questions, participants recommended the following actions by key players in the workplace education field, including federal and state policy makers, employers, unions, and education providers.

- **Communication between the U.S. Department of Education and employers.** Some participants felt that the Department should be concerned about the management approach used by businesses, particularly those involved in the National Workplace Literacy Program. But many others felt it is not the role of the Department to encourage companies to adopt a particular management approach. Participants agreed that the Department should consider offering stronger encouragement to employers to define more precisely how employee training in basic skills relates to work performed in the larger workplace context. Conversely, conference participants felt that companies should be encouraged to educate education providers about corporate culture and where education might best fit in. One group of participants recommended that government policy makers consider several strategies for getting companies to invest in employee education and training; however, group members noted limitations for each option.
- **Tax incentives**. Participants felt that while this provides an incentive for corporate investment, it does not guarantee meaningful involvement.

- **Funding for a corporate and/or union education officer.** While this is sometimes done, all future grants could require that a percentage of money be paid to a company and/or union employee who would work with the education provider to administer the program. This would not work, however, if the company or union representative had no real authority to make decisions and take action.
- **Regular reporting to funders.** Grant guidelines should require employer and union partners to regularly submit thoughtful, narrative reports about what is going on in the program. As a result, partners would have to pay close attention to the program and see whether it is meeting their goals.
- **Requirements for increasing contributions from partners.** Funders should not fund programs indefinitely. They should require other partners to gradually pick up funding for the program over a period of two to three years. This would motivate all partners to be actively committed.
- **Clearer guidelines defining "success."** Because workplace literacy education has not yet been clearly defined, funders can help shape practice by more clearly defining what is expected of programs.

One group of participants placed this discussion of national policy toward workplace literacy in a larger context: society's institutions--including schools--are not dealing adequately with the problems we are facing. Large numbers of children are leaving school unprepared to face the world of work. Workplace literacy programs should not become a new self-perpetuating educational bureaucracy. Rather, workplace education should be part of a larger national effort to create a stronger and healthier society.

State Roles in Workplace Education

One aim of the National Workplace Literacy Program is for states to take increasing responsibility for funding and oversight of workplace education efforts. When appropriations for the program reach $50 million, program funds will flow on a formula to all states. States will then supervise grants establishing partnerships for workplace education similar to those under the National Workplace Literacy Program. Participants identified the following as important activities for state policy makers taking on new roles in workplace education:

- **States should encourage diversity in program design.** This would enable projects to tailor programs to the different workforces and contexts represented by different workplaces. It would enable providers to experiment with new instructional approaches. While being flexible, state funders should be sure to reward good practice based on sound design.

- **States should make funding available to a wide range of educational providers,** including community-based organizations.

- **States should help the working poor benefit from workplace education by linking support services (like health care) to workplace literacy programs.** A comprehensive, integrated approach to human resource development is needed.

- **States need to have a realistic understanding of the funds required** to run a quality develop and operate a workplace education program. Grants that are too small do not really help anyone.

- **Each state should find ways to facilitate communication among its workplace education programs,** as well as with resource persons outside the state. This conference was cited as one way of promoting such communication. A computer network or the ERIC system might be other ways. Information about good practice must be regularly disseminated to those who need it, so they can build on what is already known.

- **States should organize technical assistance** to enable practitioners to effectively take on the job of creating a new form of education. One participant described the need for appropriate professional training as follows: "Don't give a new driver the keys to a bulldozer." This technical assistance might take the form of formalized mentoring relationships between old and new programs.

- **State funders should identify clear funding guidelines and cycles.** The gap between proposal-due dates and notices of awards should be reduced, so that providers can plan their activities more efficiently. Similarly, providers need adequate time to develop local partnerships, write proposals, and otherwise respond to RFPs. Overlap between grant cycles should not force providers to rush to wind up one program while also trying to organize a new one. Grant periods should be sufficiently long to enable a program to get going, work out bugs, and achieve something.

- **States should require evaluations by outside evaluators.** Although evaluation guidelines should also encourage each partnership to build its own internal evaluation capacities, an outside evaluator has the advantage not only of being objective but also of keeping the partnership's evaluation efforts going if momentum starts to weaken.

- States should **develop strategies for reaching small businesses**, especially those demonstrating a commitment to and vision in workplace education. This would recognize the vital role small businesses play in the U.S. economy.
- States should **take a participatory approach to helping to build partnerships** at the workplace level and across other institutions in the state. Employers, unions, and other partners should demonstrate a clear commitment to the partnership before receiving a grant award. One possible indicator of such commitment might be whether the partners budget staff time exclusively for the education program.
- States should **coordinate workplace basic skills services with other** [illegible] **services** already in place while preserving the unique identity which workplace basic skills education has developed.

FEDERAL GUIDELINES

Many participants felt that the National Workplace Literacy Program curriculum design guidelines focused too heavily on job-related basic skills. The guidelines are governed by statutory language requiring the teaching of "literacy skills needed in the workplace."[7]

Some participants wanted to focus on transferable skills that would enable students to participate in cross-training activities but believed that current guidelines would not allow education for anything other than a worker's current job. (That interpretation is not correct. All work-related literacy skills--including team-building, thinking, reasoning, problem-solving, and communication--are allowable in the current program.)

Another participant wanted to be able to provide an introduction to computers as part of the basic skills curriculum. This would build on learners' interest in computers while at the same time giving them an opportunity to practice using their basic skills to learn a job skill. (The Department does not consider computer literacy an allowable activity. It defines computer literacy as "any training above the level of computer competence needed to operate a computer-assisted program of instruction used in a workplace literacy project." Nonallowable costs include teaching of word processing, Wordperfect, etc.)

Many participants felt that educational research supports a holistic approach in which skills are strengthened by applying them to a number of meaningful tasks taken from various contexts. In such an approach, life skills and intercultural skills could be interwoven with job-related skills, not only for students but also for other employees with whom they interact. This would

[7] *Section 371 (a)(1) of the Adult Education Act, as amended.*

be done with the recognition that all of these skills reinforce each other and are needed by all workers of the future.

The research upon which much of current workplace literacy policy is based should be examined to determine if it is too narrow. Policy makers--within single agencies such as the U.S. Department of Education and across departments with common concerns--should examine this and related questions and develop long-range solutions. However, current statutory requirements rather than extensive research form the primary base for the form and direction of the program.

The focal point for instruction should be the common context in which students and employers operate. A curriculum can be built around concerns agreed upon by learners, employers, unions, and other partners. Participants felt that much of the day-to-day decisionmaking power about which combination of skills and topics to focus on at any one time should be left in the hands of the teacher, because the teacher is close to the learners' evolving interests and needs.

APPENDIX A

RESULTS OF THE "FIVE MOST CRITICAL ISSUES" SURVEY

At the end of the conference, participants were asked to submit a list of what they considered to be "the five most critical issues in workplace literacy today." Forty-five participants responded to this challenge, and their responses are summarized below in order of frequency of response. The responses reflect the participants' considerable experience, dedication, and critical thinking in the field.

Critical Issue #1: Building Effective Partnerships

The largest block of responses related to the question of how to build effective partnerships among the varied interest groups represented in workplace basic skills programs. Participants stressed the need to facilitate communication among the cultures of business, labor, and education. It was recognized that, within each of these cultures, special subcultures exist. For example, at the corporate level, different industries have different needs and in effect "speak different languages." Within management at a single workplace there are higher-level managers and shop-floor supervisors. Workers themselves can be classified by proficiency in English, income-level, race or ethnicity, or type of job.

Central to effective collaboration among these diverse players is communication. Creating good communication takes time. All partners must commit the time needed to do planning, goal-setting, and negotiation of roles. These tasks need to be done not only in the beginning stages of the program but over the life of the project as well. Such activities can, according to the coordinator of a citywide workplace literacy consortium, "meaningfully involve both educational and corporate partners--hold both accountable and empower both, set meaningful and attainable goals and help them expand their definition/perception of literacy."

Programs need mechanisms to foster this kind of dialogue among all levels of the partners to be involved. Partnerships must include active participation of not only higher-level decisionmakers but also shop-floor supervisors and the employees who are to participate in the program. A company's supervisors, for example, might be given the opportunity to learn about the company's new education program--and give input into it and thereby take ownership for it--in specially-designed workshops. Another such forum might be arranged at a community level in the form of a conference in which local business and/or labor leaders discuss workplace education issues.

Educators also need to be clear about what they will need to do a good job in a workplace education partnership. They have to be prepared, in some cases, to say no if a partner is unwilling to commit the necessary time and resources. Educators should also serve as advocates at policy-making levels, to promote the fundamental policy changes required. Finally, fundamental to all successful partnerships is mutual respect. Respect creates a positive group spirit that can carry partners through what lies ahead: a difficult journey over uncharted terrain.

Critical Issue #2: Assessment and Evaluation

Participants recognized that, in addition to creating a strong, collaborative system within which to work, they need tools to do that work. One tool they particularly need is effective methods of assessment and evaluation.

How, almost all participants asked, do workplace education programs effectively determine program impacts and assess learners' skills? How can programs provide information about the program that is meaningful to all of the parties involved? How, for example, does a program measure its impact on an employee's productivity when it is so unclear just what roles basic skills play in job performance?

Critical Issue #3: Curriculum Design

Many participants expressed concern about the type of curriculum to be used in workplace programs. Many called for a broader, more flexible definition of a workplace basic skills curriculum. Many of the participants' concerns about curriculum design came down to two questions: (1) What should the purpose(s) of workplace education programs be, and (2) What are the best ways for achieving those purposes?

The desire to broaden curriculum design beyond a job-related basic skills was reflected in three participants' recommendation to use the skills list of the American Society for Training and Development (ASTD) as a framework for defining the objectives of a workplace education curriculum. These activities currently are supportable with funds from the National Workplace Literacy Program.

A third overlapping framework for defining the skills needed in workplace basic education borrows from the field of reading and writing instruction. A New Mexico participant stated this perspective: "Seeing the ways literacy represents integrated, complex skills: oral and print; giving and taking; using your brain, hand, eye together. Redefining literacy as complex behavior, not sub-skills." Some also raised the question of how broadly this can be defined. This question acknowledged the difficulty of being all things to all people in a small workplace education program. It also acknowledged funders' desires for objectives that are quantifiable and comparable across sites.

In addition to the question of what the content of a particular workplace education program should be, several participants raised the question of how transferable a curriculum can be from program to program. As a participant from Hawaii stated it: "Workplace literacy should be seen as a transferable process rather than as materials/curriculum that can be slotted into any program."

Curriculum designers, according to at least two participants, also need opportunities to develop a clearer understanding of the workplace materials and functions. One tool that can be helpful to curriculum developers is the job task analysis. But this process needs to be streamlined, said one participant, if it is to be really useful to the field.

Beyond knowing what basic skills tasks a curriculum might focus on, a curriculum designer must also be able to tailor instructional activities to each learner's skill level and previous experience with learning. The designer also needs to understand and respect the learner's home culture so that the curriculum builds on the learner's prior knowledge and values.

Critical Issue #4: Professional Development

Many participants stressed that, to make any of the above recommendations a reality, well-trained and well-supported staff are a necessity. A central aspect of the development of this corps of workplace educators is teacher training. This staff-training system should be based on an understanding of effective instructional, evaluation and assessment, and management practices. A participant from New Mexico recommended that the U.S. Department of Education "commission a study designed to interview project directors and compile a systematic description of the various projects. The kind of report/study envisioned would quantify ways programs are comparable (in numbers of participants, outcomes measured, etc). It would also describe innovative features of programs, including methods of evaluating outcomes and special success."

The most frequently recommended forms of dissemination, however, were of the "face-to-face" variety. One favorite option was arranging for internships and on-site visits, in which staff from one program could immerse themselves in another site to learn how that program works. A participant from Hawaii noted, however, that programs in remote areas like hers are isolated from other programs, making such site visits difficult and expensive.

Conferences were viewed as another mechanism for getting professionals together. These conferences might be organized on a regional basis, or held midway through a grant period so that what is learned can be taken back home and used inmediately to strengthen programs.

A third, often-cited vehicle was some form of professional association. This more formalized attempt at creating a new identity for workplace educators addresses a problem cited by a participant from New Mexico: "Too much of what we know is not known by others. We don't read the same journals, attend the same conferences, or belong to the same professions. We are a mixed breed, and have no clear communication networks."

Although the emphasis here was on professional development, one participant from Virginia noted that volunteers do have roles in workplace education. She said: "Workplace education programs require sufficient funds to customize, implement, and evaluate projects. It is extremely important that trained, qualified, and fully-supported staff are available to teach the classes. Volunteers should be used to supplement, not supplant, teachers."

Critical Issue #5: Funding

While participants as a whole did not list funding as their number one concern, they did make a number of recommendations for better management of workplace education funding:

- **Timing of grants.** A dozen participants expressed concern about the timing of workplace education grants, particularly those from the U.S. Department of Education. Specific concerns were that 18 months is inadequate to implement programs and learn from the experience; the lag time between grant awards and actual funding is too long; the time allowed for planning and proposal writing is too short; and funding cycles are not consistent with the yearly cycles of the agricultural industry.[5]

[5] *Beginning in Fiscal Year 1992, grants will be issued for three-year periods, which will ameliorate this concern.*

- **Flexibility of guidelines.** Some participants noted that current funding guidelines do not adequately recognize the difficult nature of working with a number of partners and developing curriculums that respond to the fluctuating interests and contexts represented in workplace partnerships. According to this view, funding guidelines, because they are based on statutory requirement, may be overly rigid in defining what can be included in a curriculum and in requiring clear commitments and time-lines from applicants. Participants believe that funding guidelines should allow programs to respond to variables as they emerge.

- **Priorities for funding.** One participant from Connecticut asked policy makers to set clearer funding priorities: "Where should federal/state money be invested in workplace literacy? In large or small companies? Unions? Collaborations within industries? In companies that commit to employee retention/promotion? Those that commit to longer-range education of employees? Or those that involve unions as equal partners?" Another participant asked whether, given the limited funding being made available for workplace basic skills, we in effect have to perform "educational triage." Do we need to make the hard choice of targeting resources, perhaps at those most likely to succeed instead of low-level readers?

- **Assumptions on which workplace education funding is based.** As previously described, a large number of participants called for a redefinition of the goals of workplace education. These arguments cited research and field experience as the bases for such a clarification. One of the proponents of this view recommended that policy makers re-examine the assumptions and research on which Congress based the statutory requirements for the program:

  > "The rigid view of job-specific curriculum development held by many leaders in workplace literacy is dangerous. Job-specific curriculum development makes sense because it utilizes the concept of integrating prior knowledge into instructional design. The danger, however, lies in the belief that it is the only way to develop good curriculum. This rigid view is based on a small amount of research conducted by a few people who have done adequate research, but with a very, very narrow focus. The need for funding more research in what works in workplace literacy is crucial."

- **Continuation and expansion of funding.** Many of the participants raised the question of how to expand funding beyond the current reliance on federal grants. In particular, participants wanted to know how to get businesses to invest in workplace basic education. One way is solid up-front negotiation. As a Massachusetts representative stated it, "Make the preliminary discussion and goal-setting between educator and company a lot more solid." Such clarification of responsibilities should reduce the current tendency toward "too much grabbing for grant money without considering the need for ongoing involvement."

  Other questions about the future of funding focused on the shifting of responsibilities to the states. One participant from California said "Institutionalization of programs [particularly at the state level] may fragment programs. Differing funding cycles [between states] will cause a lack of cohesion [among programs across the nation]. Tracking effectiveness and networking [of programs across the country] will be more difficult as funding switches to state level." Another participant expressed concern that workplace literacy money will be "watered down" when states take over funding and try to stretch less money over more programs.

- **Smoother communication with funders**. A number of recommendations focused on the mechanics of the proposal-writing process. It was suggested that the Department take some specific steps to improve the system by which it communicates with grant applicants. For example, a participant from Hawaii noted that the Department staff can learn about applicants and provide useful information. Among the steps suggested were more monitoring visits by Department staff, use of electronic communications, and revising the Education Department General Administrative Regulations (EDGAR) to focus on the specific information needed by workplace education programs.

Miscellaneous Issues

- **Targeting groups underserved** by workplace education, such as rural areas, small businesses, the working poor, and limited English proficient workers.[6]
- **Recruitment and retention** of learners. A number of participants recommended research on recruitment and retention, especially factors that encourage or inhibit learner participation, and strategies for making best use of the encouraging factors while minimizing damage from the inhibiting factors. For example, researchers might look at the question of release time. How much release time should be given to students participating in an education program? Under what conditions? What are the costs and benefits for a company?
- **Support services** needed to facilitate active learner participation in an education program--for example, vocational or personal counseling, daycare, or transportation. Researchers might also look at whether involving students in the planning and management of the program is a way of encouraging workers to take ownership of the program and participate actively.
- **Preventive measures**. Several participants argued that the workplace literacy field must promote preventive measures to eliminate the need for workplace basic skills programs. Such preventive measures would include family literacy programs and higher-quality, more appropriate high school curriculums. As one participant from Michigan stated, "The workplace literacy program should not exist. It is a reaction to a system failure, and thus must establish criteria for its own demise."

[6] *The 1991 National Literacy Act placed a priority on programs involving small businesses.*

APPENDIX B

RESULTS OF THE "PROGRAM CONTINUATION ISSUES" SURVEY

The Questions

On the second day of the conference, the organizers distributed a questionnaire to participants asking them to describe the most critical factors influencing program continuation. The questions were:

1. In what type of industry is your education program located: manufacturing, service or other?
2. In your judgment, should this program be continued when federal funding is no longer available? Yes/No Why or why not?
3. Does the employer think this program should be continued when federal funding is no longer available? Yes/No Why or why not?
4. In your estimation, will this program be continued when federal funding is no longer available? Yes/No Why or why not?

The Responses

Of the total 40 responses, 19 represented manufacturing, 15 represented service and six represented "other"--representing collaborations between different industries or agriculture.

Critical Factors

- **Funding**. Funding is the single most important factor affecting program continuation. If there is no money to support the program, then the program cannot continue. But it is not clear who is responsible for funding program continuation. Nor is it clear what goals these resources should support. The federal government has made a long-term commitment to workplace education, but federal money can be used to fund programs only in the shortterm, leading to support from the companies and other partners involved. The private sector must assume the cost of workplace education in the long run. But will it be able to do so? In a highly competitive global environment, can companies that already understand the value of education afford to invest in it? Conference participants believed that many will not be able or willing to make that investment.
- **Employer vision**: understanding the linkages between education and company goals. In those workplaces where there is visionary leadership, the likelihood of continued funding increases. A seed program can help to foster a vision, forge linkages, and clarify philosophy. But eventually, the program will continue only if top-level managers and union officials who govern funding say that education is worth the investment.

- **Ability to demonstrate through evaluation that education is actually meeting employer needs.** Even employers and unions with vision regarding their education program need proof that the program they are investing in is working. Therefore, investing in meaningful evaluation is also critical to program continuation.

- **Communication within the partnership.** Without regular and complete communication about all aspects of the program, the partnership does not have the information it needs to make a sound decision about continuation.

- **The institutional capacity of the organization to continue an education program.** The responses indicated that 39 participants believed their programs should continue. Only one said his should not. Thirty-four participants said that the employer thinks the program should continue. Two said that the employer does not think the program should continue. Three said that the employer has mixed opinions--"yes and no"--about continuing the program. Twenty-four participants said that their programs will continue. Twelve said they will not continue. Eleven were unsure.[7]

  The intention to continue a workplace basic skills program has to find a home either in an already existing department--such as a training and development department--or in a continued relationship with an outside learning provider. The option to transfer responsibility for the basic skills program to an already established training and development department increases the probability of program continuation.

- **The conditions of the labor market.** If the skills gap continues and people enter the labor market with lower and lower skills, the need for work-related basic skills programs will increase.

- **Time.** A basic skills program needs enough time to establish itself within the culture of the workplace before educators can expect employers and unions to invest in its continuation. Participants felt that two to five years is needed for a basic skills program to establish itself in the culture of the workplace.

[7] *Responses may not add up to forty. Some participants did not answer all questions and ohers answered the same questions twice.*

APPENDIX C

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APPENDIX D

CONFERENCE AND REPORTING TEAM

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Division of Adult Education and Literacy
Division of National Programs
Office of Vocational and Adult Education
United States Department of Education

CONFERENCE LOCATION AND DATES

Hyatt Regency Hotel
Crystal City, Virginia
September 13-15, 1991

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